ABSTRACT OF THE DISCLOSURE

An autostereoscopic display apparatus broadly comprises a backlighting means for projecting light, a spatial light modulator for modulating light emanated by the backlighting means, lens array comprising a plurality of lenses and an optional aperture screen for blocking unwanted light and for minimizing reflections from the external lighting. Said apparatus is used to reproduce directional distribution of light from a computer generated or a photographically captured three-dimensional scene. It is preferred that a collimated light source is used as the backlighting means. The aperture screen is used to improve the quality of the autostereoscopic image when the backlighting means exhibit some diffuse properties. For instance, the aperture screen can be used as a device to select only those rays from the backlighting means that are orthogonal to the plane of the spatial light modulator.